

AMENDMENTS TO THE CLAIMS

Please cancel claims 48 and 67 without prejudice.

Please amend the claims as follows:

1-45. (Cancelled)

46. (Currently amended) A method comprising:

receiving a signal pulse; and

in response to the signal pulse:

pulling a voltage of a sense input node for a non-volatile memory cell to a

voltage potential of a voltage source by enabling a first kicker

device coupled to a first drain bias circuit for the non-volatile

memory cell;

pulling a voltage of a reference input node for a reference cell to the

voltage potential of the voltage source by enabling a second kicker

device coupled to a second drain bias circuit for the reference cell;

and

shorting a sense node for the non-volatile memory cell to a reference node

for the reference cell.

47. (Previously presented) The method of claim 46, wherein the non-volatile memory cell comprises a flash memory cell.

48. (Cancelled)

49. (Currently amended) The method of claim 48 46, wherein the first kicker device and the second kicker device each comprise a high performance transistor.
50. (Currently amended) The method of claim 48 46, wherein shorting the sense node to the reference node comprises enabling a semiconductor device coupled between the sense node and the reference node.
51. (Previously presented) The method of claim 50, wherein enabling the semiconductor device coupled between the sense node and the reference node equalizes a voltage potential of the sense node with a voltage potential of the reference node during bit charging.
52. (Previously presented) The method of claim 51, further comprising:
pulling the voltage potential of the sense node to the voltage potential of the
voltage source minus the voltage across the first drain bias circuit; and
pulling the voltage potential of the reference node to the voltage potential of the
voltage source minus the voltage across the second drain bias circuit.
53. (Previously presented) The method of claim 46, wherein the signal pulse is received prior to sensing the contents of the non-volatile memory cell.
54. (Currently amended) The method of claim 48 46, wherein the first drain bias circuit and the second drain bias circuit each comprise a cascode amplifier.
55. (Previously presented) A non-volatile memory device comprising:
a first kicker device, a first terminal of the first kicker device being coupled to a
voltage source and a second terminal of the first kicker device being

coupled to a first drain bias circuit for a memory cell of the non-volatile memory device;

a second kicker device, a first terminal of the second kicker device being coupled to the voltage source and a second terminal of the second kicker device being coupled to a second drain bias circuit for a reference cell of the non-volatile memory device; and

a semiconductor device, a first terminal of the semiconductor device being coupled to a sense node of the memory cell and a second terminal of the semiconductor device being coupled to a reference node of the reference cell;

in response to a signal pulse:

the first kicker device pulling a voltage of a sense input node for the memory cell to a voltage potential of the voltage source,

the second kicker device pulling a voltage of a reference input node for the reference cell to the voltage potential of the voltage source, and

the semiconductor device shorting the sense node with the reference node.

56. (Previously presented) The non-volatile memory device of claim 55, wherein the non-volatile memory device is a flash memory device.
57. (Previously presented) The non-volatile memory device of claim 55, wherein the signal pulse is received prior to sensing the contents of the memory cell.

58. (Previously presented) The non-volatile memory device of claim 55, wherein the first kicker device and the second kicker device each comprise a high performance transistor.
59. (Previously presented) The non-volatile memory device of claim 55, wherein the semiconductor device equalizes a voltage potential of the sense node with a voltage potential of the reference node during bit charging.
60. (Previously presented) The non-volatile memory device of claim 55, wherein the first drain bias circuit and the second drain bias circuit each comprises a cascode amplifier.
61. (Currently amended) A flash memory device, comprising:
a memory cell array;
a reference cell array;
a first drain bias circuit for a memory cell in the memory cell array and a second drain bias circuit for a reference cell in the reference cell array;
a first kicker device, a first terminal of the first kicker device being coupled to a voltage source and a second terminal of the first kicker device being coupled to the first drain bias circuit;
a second kicker device, a first terminal of the second kicker device being coupled to the voltage source and a second terminal of the kicker device being coupled to the second drain bias circuit; and
a semiconductor device, a first terminal of the semiconductor device being coupled to a sense node of the memory cell and a second terminal of the

semiconductor device being coupled to a reference node of the reference cell;

upon receiving an enable signal:

the first kicker device pulling a voltage of a ~~reference~~ sense input node for the memory cell to a voltage potential of the voltage source,
the second kicker device pulling a voltage of a reference input node for the reference cell to the voltage potential of the voltage source, and
the semiconductor device shorting the sense node with the reference node.

62. (Previously presented) The flash memory device of claim 61, wherein the enable signal is received prior to sensing the contents of the memory cell.
63. (Previously presented) The flash memory device of claim 61, wherein the first kicker device and the second kicker device each comprises a high performance transistor.
64. (Previously presented) The flash memory device of claim 63, wherein each high performance transistor is a P-channel semiconductor device.
65. (Previously presented) The flash memory device of claim 61, wherein the semiconductor device equalizes a voltage potential of the sense node with a voltage potential of the reference node during bit charging.
66. (Previously presented) The non-volatile memory device of claim 61, wherein the first drain bias circuit and the second drain bias circuit each comprise a cascode amplifier.

67. (Cancelled)